

Title (en)

ICE-FREE VITRIFICATION AND NANO-WARMING OF LARGE TISSUE SAMPLES

Title (de)

EISFREIE VERGLASUNG UND NANOWÄRMEBEHANDLUNG GROSSER GEWEBEPROBEN

Title (fr)

VITRIFICATION ET NANO-RÉCHAUFFEMENT SANS GLACE DE GRANDS ÉCHANTILLONS DE TISSU

Publication

**EP 4054327 A1 20220914 (EN)**

Application

**EP 20816711 A 20201104**

Priority

- US 201962931943 P 20191107
- US 2020058843 W 20201104

Abstract (en)

[origin: US2021137099A1] Large volume cellular material may be preserved by combining the cellular material with a cryoprotectant formulation/medium/solution containing at least one mNP and then subjecting the cellular material to a vitrification preservation protocol including nanowarming. This preservation method is particularly effective for cartilage tissues.

IPC 8 full level

**A01N 1/02** (2006.01); **A01N 59/16** (2006.01)

CPC (source: EP US)

**A01N 1/021** (2013.01 - EP); **A01N 1/0221** (2013.01 - EP US); **A01N 1/0284** (2013.01 - EP); **A01N 1/0294** (2013.01 - EP); **A01N 59/16** (2013.01 - EP)

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**US 2021137099 A1 20210513**; BR 112022007399 A2 20220705; CA 3161472 A1 20210514; CN 114727594 A 20220708; CN 114727594 B 20240712; EP 4054327 A1 20220914; JP 2023506132 A 20230215; WO 2021091984 A1 20210514

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